



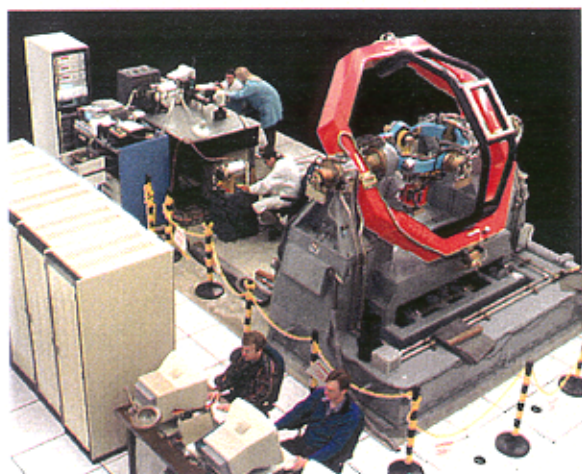
System Simulations and Development Directorate

CORE CAPABILITIES

Aerodynamics
Computational Fluid Dynamics
Distributed Simulation
Force-on-Force Simulation

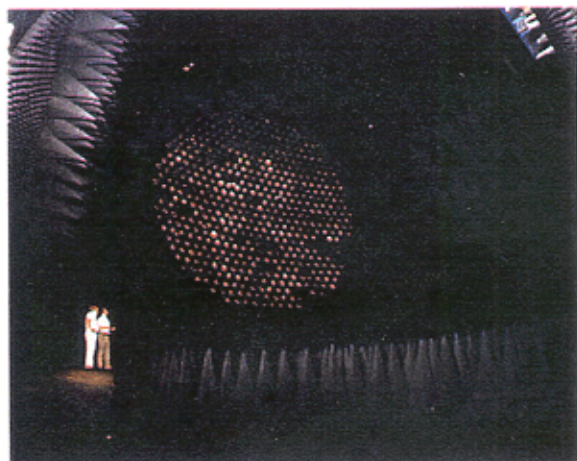
Hardware-in-the-Loop Simulation
Systems Analysis
Virtual Simulators

Imaging Infrared Simulation System (I²RSS)



Real-time target scene generation and image projection in the Infrared (IR) spectral region is a technical challenge to provide Hardware-in-the-Loop simulation for the latest generation of IR guided missiles.

Radio Frequency Simulation System (RFSS)



This Hardware-in-the-Loop simulation facility radiates actual radar waveforms which represent target signatures, clutter, and multipath signals for checkout, evaluation, and flight test support for microwave radar guided missiles.

Virtual Simulator



Person-in-the-Loop simulators allow evaluation of new equipment and tactics in the overall context of a synthetically realistic environment before a commitment is made to build the hardware.

Optics System Development



Infrared image projection requires development of variable field-of-view collimators and special purpose image control optics